

SEARCHING FOR NEIGHBOR CELLS WITHIN A FIXED TIME DURATION

ABSTRACT

[1106] Techniques for searching neighbor cells within a fixed time duration are disclosed. In one embodiment, cells in a monitored list are ranked. A first subset of the ranked cells are searched during each cycle in a series of cycles, and a subset of the remainder of ranked cells is searched in each cycle, the subset varying from cycle to cycle. In another embodiment, the ranking and searching of a subset of the ranked list of cells is performed when the number of monitored cells is greater than a predetermined search number. In yet another embodiment, the complete list of monitored cells is searched when the number of monitored cells is less than or equal to a predetermined search number. In various embodiments, the searching comprises one or more of intra-frequency, inter-frequency, or inter-RAT searching. Various other embodiments are also presented. Benefits include allowing prescribed levels of intra-frequency, inter-frequency and/or inter-RAT search to be performed allowing for improved base station selection and therefore improved performance and system capacity.